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ABSTRACT

This report summarizes the activities and accomplishments of the Montana Faxnet Project, which was created to design and demonstrate a statewide document delivery network utilizing telefacsimile equipment that would create equitable access for all Montanans accessing and retrieving information, and reduce the waiting time for requested materials from weeks to same day service. This final report on the 2.5 year project discusses: (1) the procurement of equipment; (2) the backgrounds of the client sectors who participated in the demonstration project; (3) strategic market planning; (4) networking techniques used to create a long-term network; and (5) educating the general public about facsimile technology and its potentials. The statistical section of the report provides measurements of the volume of use and patron satisfaction; compares differences in sector usage; and reports the turnaround time required to deliver the information. It is concluded that the use of facsimile technology has diminished the geographical barriers separating the state from national power brokers and made information access more equitable to individuals residing in the state. Seven appendixes include a description of the project requirements and an application form for libraries wishing to participate; an outline of the goals and objectives of the project; a statement of system policy on telefacsimile use; an analysis of the costs of providing telefacsimile services; an invitation to a seminar on "the competitive edge"; a Montana Faxnet information request form; and a form for the user to evaluate Faxnet services. (CGD)

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FINAL REPORT

OF THE

MONTANA FAXNET PROJECT

HELENA, MONTANA

PREPARED BY

LINDA L. BRANDER
PROJECT DIRECTOR

STATE LAW LIBRARY OF MONTANA
215 NORTH SANDERS
HELENA MT 59620

OCTOBER 1988

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Thanks also are extended to the Montana Faxnet Advisory Board (Lois Fitzpatrick, Suzy Holt, Judy Meadows, Darlene Staffeldt and Deborah Schlesinger) who provided input, support and assistance in the areas that affected the growth and development of the Big Sky Facsimile Network.

Last, I thank all of the participants that worked with the Project by demonstratin the new technology. Their willingness to test the equipment aided in the long-term development of the document delivery network.

Linda Brander
Project Director

PROJECT OVERVIEW

The Montana Faxnet Project, funded by the Fred Meyer Charitable Trust, was organized in 1986 to demonstrate a statewide document delivery system utilizing telefacsimile equipment.

The purpose of the grant was to document the association between the time required to receive requested information and the subsequent value of that information to the user. Five client sectors (business, medical, legal, educational, governmental) participated in the demonstration project. After the demonstration component was finalized, the Faxnet Program granted the project-owned units to 16 public libraries who became the permanent owners.

It was the intent of the grant to design a system which would create equitable access for all Montanans accessing and retrieving information. Prior to the implementation of the facsimile network, patrons were forced to wait weeks for requested materials. After facsimile machines were installed in local information sites, individuals were able to access and retrieve information the same day it was requested. The facsimile technology also benefitted the private sector who used the equipment to transfer business documents to state and national locations.

The message of facsimile technology had to be shared with as many Montanans as possible. Several methods of getting the word out were used.

The Faxnet Grant created a marketing plan designed to educate users, develop critical mass and expand the existing network. Public relation campaigns were used to target facsimile vendors, information specialists, library patrons, professionals and private business people. Through the efforts of a promotional campaign, the Montana Faxnet Project developed a viable facsimile network establishing connections between medical facilities, governmental agencies, legal organizations, information sites and international markets.

When the grant started in 1986, a limited number of fax units existed. Approximately 800 Montana organizations have incorporated facsimile technology into office automated systems. Vendors predict a 2-year sales growth of five times that figure.

The Montana Faxnet Project was a successful project. Facsimile technology has diminished the geographical barriers separating the state from national power brokers and made information access more equitable to individuals residing in Montana. Library patrons and private users now have the opportunity to rapidly transfer information to any place in the United States or the world.

EQUIPMENT OVERVIEW

The procurement of facsimile equipment was a slow, arduous and at times, frustrating process which was riddled with a lengthy requisition process, insufficient technical expertise, legal difficulties, bureaucratic problems, and equipment malfunctions. After the Project was implemented, 11 months elapsed before the statewide facsimile network was totally operational. The following points will summarize the equipment procurement process.

EQUIPMENT PROCUREMENT

Lengthy Requisition Process

The Montana Faxnet Project was required to follow the State's purchasing guidelines. When investigating these procedures, it was discovered that there were two options available. Not knowing which direction to choose, the Director conducted an investigation asking different professionals for advice. State purchasing agents advised one way, state computer support people recommended a different method, and library professionals were split as to which procedure should be followed.

The method selected, rarely used by the State of Montana Purchasing Division, was called the Request for Proposal (RFP). This procedure allowed the Project to investigate a wide array of equipment, configurations, and prices. However, this process also consumed large amounts of time which were unacceptable to a program with a two-year life cycle. The other purchase plan required approximately one month to investigate and purchase equipment versus the five-month period necessary to complete the RFP process.

Insufficient Technical Expertise

The Montana Faxnet Project was the first state program to address the purchase of facsimile equipment. Professionals at the State level (Purchasing Division) were not familiar with fax equipment, specifications and functions. At the time, the Project Director did not have the needed technical expertise available to her. Extensive research was required to compile equipment configurations, specifications and other criteria.

Bureaucratic Problems

In order to have had a valid legal agreement, the State Purchasing Division had to compile equipment contract papers and collect a performance bond. These components are developed to protect the agency and the vendor. These two tasks were not completed, which at a later date proved to be detrimental to the ongoing and consistent operations of the Faxnet Program.

Equipment Malfunctions

Equipment installation required three months to complete. The Project headquarters had interfaced a Xerox 495 with a microcomputer. This interface was plagued with problems never resolved. Because no performance bond had been collected and no contract compiled, the Project legally was powerless to negotiate a resolution. A settlement was reached, but only through the close working relationship established between the regional facsimile manager and the Project Director. The Faxnet Program was able to initiate an exchange of equipment in a three-month process.

The sites involved in the equipment exchange were the five Helena-based libraries. One Xerox 495 and four Xerox 295's were exchanged for five Xerox 7021's.

Legal Difficulties

After the evaluation process was completed and the successful facsimile vendor selected, a formal protest was filed against the State of Montana and the Montana Faxnet Project. Preparation and response to this action consumed additional time. After legal consultation, it was decided that the Project would adhere to its original decision. The formal protest was not pursued by the opposing bidder.

EQUIPMENT CHOSEN

The Project designed three equipment levels which included an interface between the fax and personal computer, a mid-level fax machine with one megabyte of memory and a low-volume fax unit. The most popular was the mid-level fax unit because it allowed sites to send after hours, perform speed dialing and fax photographs.

The fax unit which was interfaced with a personal computer automated all fax operations and allowed for remote operations to be conducted. By using a password, remote users could electronically access the main system and retrieve information. Documents printed in an ASCII format were able to be converted to a bit mapped image for facsimile transmissions. This type of equipment is meant to serve a large network, much larger than the Faxnet system. For example, a total of 30,000 user passwords can be programmed into the system.

After the Project was terminated in October 1988, the State Law Library of Montana used this system to provide electronic access to Montana Supreme Court and Attorney General Opinions. This service provided lawyers with the opportunity to retrieve that information on the same day it was released from the Court and Attorney General's Office.

When using an interfaced computer system, the computer should be used only for facsimile communications. The Project had to use its workstation to conduct other business such as WordPerfect and Lotus functions. When these programs were in operation, remote terminals could not access the system.

To successfully use this type of system, extensive training is required in order to assure effective operations. The menu driven software is not difficult, but in order to become comfortable with the equipment operations and capabilities, one must perform the functions on a frequent basis.

For an organization conducting only occasional transmissions, a small unit is suitable. Among the field sites, the average number of pages sent on a monthly basis was 63. Prices ranged between $3300 and $1500 for the Project-purchased facsimile equipment. The interfaced system including the computer cost approximately $6000. Cost recovery on the most expensive machine is impossible for occasional transmitters.

Summary

The problems experienced offered a valuable learning experience to the Project. The difficulties delaying the initial implementation date placed the Project behind schedule. This constraint meant that demonstration schedules were reduced from 6 to 4 and 5 month periods. A 4 and 5 month plan was an insufficient testing phase because it did not allow for adequate time to market, promote and use the technology.

EQUIPMENT PLACEMENT

After all of the issues had been resolved, the Project initiated a 5-month equipment rotation plan. Throughout the course of an 18-month period, the equipment was rotated three times.

More time delays were experienced with inappropriate telephone equipment. In order to operate a fax machine, a single line with an RJ-11 Jack is required. In many situations sites had telephones which were hard-wired, multi-line telephone sets, or telephone systems (i.e. Merlin Systems) which were incompatible with the fax unit. All of the above problems required the technical expertise of the phone company, costing sites unanticipated expenses. Solving the phone line problem, for example, usually required the installation of an extension outlet, involving a $50 minimum charge. Many times these telephone problems were not discovered until the equipment was installed by the Project Director, which meant the planned training session had to be rescheduled.

EQUIPMENT MAINTENANCE

The Faxnet Program negotiated a one-year warranty on all equipment purchased from the Xerox Corporation. After the warranty expired, maintenance problems were billed on a hourly basis amounting to $190/hr which covered time and materials.

After the warranty period expired, a total of $1035 was spent on service calls, compared to $5830 which would have been required to purchase maintenance contracts for all 22 machines.

Effective October 30, 1988, it became the responsibility of each individual site to pay for and maintain the fax unit. Due to several physical moves, shipping problems and numerous operators, several repair calls were required between April and October, 1988. Because of these problems, the Faxnet Director made a recommedation that each field site secure a maintenance contract which cost $230 annually for the Xerox 7010 units and $430 for the Xerox 7020 equipment; 20 libraries purchased maintenance contracts.

RECOMMENDATIONS

1. Compile a detailed contract outlining the responsibilities of each party.

2. Review the telephone equipment when implementing several field rotations and allow for additional expenses which may be required to make the telephone system compatible with the facsimile equipment.

3. Negotiate a one-year or six-month warranty.

4. Match the equipment with the agency's needs; do not buy a unit which will exceed organizational needs.

5. Select a company which will provide support after the product has been sold. The Xerox Corporation, as well as others, have toll-free numbers to assist with equipment operations and problems.

6. Centralize all service problems. The Project centralized all service calls. This system allowed the Project to monitor the durability of the equipment, maintenance problems for each fax unit and response times of the Xerox Company. Also, in many instances, the problem did not merit a service technician and was solved with a few basic instructions given by the Faxnet Staff.

7. Implement a 6-month demonstration schedule; the Project had to work within the constraints of a 4-5 month plan which was not satisfactory.

8. Purchase equipment, including software, from one vendor. It is easier to identify and determine the responsible party when problems arise. The Xerox Corporation also manufactured its own software program; other fax companies sub-contracted with software dealers. If a malfunction happens, it must be clear who is responsible for the system (the fax company or the software vendor).

CLIENT SECTORS

The goal of the grant was to provide rapid delivery of information to decision-makers working in the sectors of government, law, medicine, education and business. In order to meet this goal, facsimile equipment was to be placed in information sites serving these professionals.

There were three sets of a 5-month demonstration phase.

LEGISLATIVE PROJECT

The first group served was Montana Legislators and constituents. A fax unit was centrally placed at the State Capitol with 15 other units installed in libraries throughout the State. This program proved to be highly successful with over 5000 pieces of information generated over the course of four months. The system was available to fax constituent's testimony, legislator's documents, lobbyist's information, journalist's reports and legislative updates.

Due to the success of the 1987 Legislative Fax Service, the State of Montana will provide that service again during the 1989 Session.

BUSINESS/LAW PROJECT

The second demonstration period targeted the business and law sectors. Finding appropriate placements for this category was difficult, particularly in the legal field.

Two main problems surfaced. The first was a grant restriction which prohibited placement of the fax equipment in profit-making organizations. This meant that fax machines could not be placed in law firms.

Attempts were made to place the fax machines in federal and district courts, but there was a lack of interest; in many cases, some of these courts did not want to bother with a five-month demonstration. One district court did agree to participate, but it proved to be an ineffective site generating a small number of transmissions and a lack of cooperation.

In order to test the legal market, machines were placed in three Legal Service offices, which were federally funded non-profit organizations. Once again, the equipment was not well-received in the three offices. Because each office was separated by a distance of approximately 300 miles, the expectation was that internal communications would have occurred. Also, the remote offices would have the opportunity to retrieve information from the State Law Library, but this service was not utilized.

If the Project had been able to place the units at private firms, the end results could have been different. Presently in Montana, legal usage is increasing. It has been a real benefit for Montana attorneys to have the ability to retrieve same day information from the State Law Library.

Providing demonstration opportunities in the business sector also had unanticipated problems. The Project placed the equipment at Chambers of Commerce. After the equipment was placed, several Chambers experienced a staff turnover in director's positions and this change produced downtime in service and a lack of commitment to the project.

In both the legal and business sectors, there was a lack of commitment. The total volume generated was 45% less than that of the Legislative sector.

HEALTH/EDUCATION PROJECT

The health and education group enthusiastically adopted and promoted facsimile technology, generating over 9000 pages of volume.

Two main reasons for the success in this phase stemmed from two key individuals who were excited and committed to the technology. Because of this enthusiasm, they personally used the fax machine for many functions and encouraged network participants to utilize fax machines for administrative communications.

One group which adopted the idea of telefacsimile networking was the Montana Health Network, a consortium of seven rural hospitals. The director of that network was the key figure in promoting the technology. She worked with a group of hospital administrators that in the beginning were not overly enthused about participating in the five-month demonstration project. After one month, she had persuaded five of those administrators to use the fax machine on a regular basis. The trickle down theory took over and many other hospital staff started to use the machine to send purchase orders, conduct union negotiations, develop grants, send agendas and transmit patient records.

All participants in the Montana Health Network purchased a fax unit. After monitoring the Montana results, a South Dakota health consortium purchased five fax machines and placed them in a network of hospitals.

The education sector served a clientele of adults participating in an Adult Education Program. Most of the individuals were completing Graduate Equivalency Degrees. Fax units were placed in seven public libraries and one community college where the program coordinator was located. She supervised seven resource counselors located in the rural communities. The goals of the Adult Education Program involved counseling, proctoring exams and evaluating tests results.

PUBLIC LIBRARIES PROJECT

After the five-month demonstrations phases were completed, the Project made a determination to permanently place the equipment in public libraries. Public libraries were chosen because they were viewed by the public as accessible to all individuals and not limited to a specialized clientele. Through a grant process, 16 public libraries were selected. Many of these public libraries have offered fax service to commercial users to transmit business information (contracts, bids). In many of the small rural communities this has been a successful program because Federal Express does not serve these areas. Bankers, lawyers, political groups and others have found the service to be very beneficial.

Approximately 30 libraries own and operate a facsimile unit.

The network of public libraries has been working closely to provide more timely delivery of inter-library loan materials and to communicate more effectively with other library directors. These libraries share resources and provide rapid delivery of information to their patrons.

It is anticipated that more Montana libraries will attempt to purchase fax machines.

SUMMARY

The placement and rotation of the equipment required considerable time to plan. At times plans had to be readjusted, which, in certain cases, caused hard feelings among potential participants.

The demonstration phases were most successful when the targeted group already had an established network. For example, the Legislative Project focused on legislators and constituents, the health plan served a consortium and the education group served a network of counselors and students. Each of these groups had a need to communicate on a regular basis.

The business and law segments did not use or promote the facsimile technology to the degree of other sectors. Neither of these sectors communicated on a regular basis to other colleagues or professionals. Also, neither of these two sectors were service oriented.

In order to promote the technology in a test situation, it is important to have established communications on a regular basis to network users.

RECOMMENDATIONS

1. Strive to achieve commitment, interest and participation from individuals. Members of the Business/Law group were not overly enthused about the Faxnet Project and therefore, did not utilize the technology to its fullest potential.

2. Design a detailed market plan because strategic planning and analysis of your market is critical. In April 1988, the Faxnet grant sponsored a workshop on marketing which addressed the above issues. That type of workshop should have been conducted during the first six months of the project. The pre-planning stages of the Project would have been easier.

3. Target a sector which already serves a network. It is important to establish a critical mass among users. In order to demonstrate telecommunication equipment, an organization should be linked into other locations.

4. Identify organizations which can promote a special project or service. For example, the three most successful demonstration sectors involved special projects and/or conducted frequent communications with colleagues. The Legislative sector promoted the transfer of testimony into the State Capitol, the health group conducted daily communications involving association business and the education segment coordinated educational activities via the fax network.

MARKETING THE CONCEPT

Marketing is a planning process which designs products and services to meet the needs of the consumer. In order to implement a statewide document delivery system, the Montana Faxnet Project implemented a marketing plan.

SEGMENTATION

The Montana Faxnet Project had to design a marketing plan which targeted information providers and information requestors (five client sectors: business, legal, educational, medical and governmental organizations).

INFORMATION PROVIDERS

A survey was sent to 70 potential demonstration sites in an attempt to determine interest levels, degrees of commitment and the ability to pay for certain expenses (communication costs, supplies). The results indicated that less than 30% could afford to assume the expenses.

Originally it was anticipated that each demonstration site would be financially responsible for supplies, communication charges and rental fees. However, after survey results were evaluated, it became apparent that economic constraints would restrict participation. Therefore, the Project had to devise a new strategy for equipment placement. The Faxnet Program made a decision to eliminate the rental charge and pay for supplies and actual communication charges not to exceed an amount of $150. Planning and re-evaluating strategies became a very important process in the development of the document delivery system. Certain grant goals had to be altered in order to make the project marketable.

INFORMATION REQUESTORS

The document delivery system was designed to access and retrieve information in a timely manner. Prior to the development of the facsimile network, requested materials required between one and four weeks to receive. It was the intent of the grant to determine if facsimile technology tied together in a statewide plan could improve the existing delivery system. The target audiences encompassed people working in the business, medical, legal, educational and governmental professions.

Because decisions are made based on the information available, the focus of the service plan evolved around the timely delivery of appropriate information to community leaders. Could having the proper background materials available substantially influence the decision-making process? For example, an attorney practicing law in a small community may need legal information to substantially develop a case. If that attorney in the same day could request and receive legal materials from the State law Library located 300 miles away, could that information affect the case?

The promotional campaigns were designed to promote the concept of rapid information delivery and efficient service which could be provided by a local library. The campaign would initiate a positive image change for libraries, develop a new client market (community leaders) and increase the number of patrons. It was hoped that the introduction of a new facsimile service would develop contact with a new set of patrons.

After the network had been in operation for four months, an unanticipated consumer demand for a courier service surfaced. Transferring business documents(contracts, bids, letters) became a viable service for all demonstration sites because in most rural areas Federal Express Services did not exist. The promotional campaign was expanded to include this market. In many of the remote areas it has been a popular program which has brought new patrons into the library.

MARKETING THE NETWORK

After the three demonstration phases were completed, the Project made a determination to transfer the equipment to the private ownership of public libraries. Libraries were chosen because they were viewed by all individuals as open to the general public and not limited to a specialized clientele.

A list of criterion was developed which outlined mandates and commitments required to be eligible. (See Appendix A) The grant application was distributed to 112 public libraries; only 18 responded, mainly because certain financial commitments were required. After an evaluation process, 16 sites were chosen to receive telefacsimile machines.

After the equipment had been installed at the 16 libraries, a strategic planning process was initiated which was designed to define and evaluate the product, develop a pricing strategy, compile a statewide policy and design a statewide promotional campaign.

In order to foster ownership in the statewide network, individual librarians were selected to participate in the strategic planning process. The results from each committee have been summarized in outline form. Some of the committee reports have been appended to this report.

Product Identification

In order to market the appropriate product to the appropriate audiences, each demonstration site had to have a clear understanding and definition of its service. Three levels of service were defined, consisting of a library service, courier program and a remote access feature.

Library Service

The library service provided rapid delivery of printed information excluding complete volumes of hard-bound materials. The promotional campaign targeted staff, trustees and patrons. The patron group was segmented to include educators (administrators, teachers, traditional and non-traditional students), lawyers and business professionals.

Courier Program

During the demonstration phases of the grant, a consumer demand had been created for a courier service. Many (not all) libraries developed this market. Some of the larger libraries did not offer this service because they did not want to be in competition with commercial facsimile vendors.

The courier-based program was a service designed to provide rapid delivery of business and personal documents, i.e. bids, contracts, letters, graphics. The target audiences for the courier program consisted of bankers, contractors and small business operators.

Remote Access

The remote access plan offered legal professionals the opportunity to electronically access the Helena-based system and retrieve Montana Supreme Court and Attorney General Opinions. The remote users can have the document sent to the office or forwarded to the nearest fax machine, which in most cases will be the library.

Promotional Campaign

A statewide committee was organized to develop a promotional strategy for the network. The public relations campaign was organized to educate users and promote library-based facsimile service.

The following goals were compiled. A detailed outline of goals and objectives can be reviewed in Appendix B.

1. Orient, train and educate the library staff in the areas of equipment operation, facsimile technology and facsimile applications. By educating the library staff, the library patron is better served and educated.

2. Identify and educate library patrons about facsimile technology, networks, applications and state and national resources.

3. Orient and educate the library board in the areas of equipment capabilites, facsimile technology, and facsimile applications.

4. Identify and educate specialized patrons about the fax service, its applications, and state and national networks. The specialized patron may include: physicians, lawyers, city/county officials, legislators, journalists, etc.

5. Orient, train and educate school officials, school boards, teachers and students in the areas of equipment capabilites, basic facsimile technology and potential applications.

Statewide Policy

A statewide policy was compiled which addressed protocols for the sending and receiving libraries, commercial usage and remote access procedures. Appendix C outlines policies and procedures.

Pricing Strategy

A team of individuals structured a cost-recovery program which libraries could implement. The goal of the cost-recovery study was to gather statistics, conduct a market analysis, calculate expenses and develop a cost recovery program.

During the testing phases of the project, all expenses were paid by grant monies. In order to transfer the network from a grant-operated system into a privately-funded network, a fee-based service was researched. The research addressed non-library related fax transmissions.

The final report (Appendix D) designed a cost-recovery program which was based on a per page recovery rate as a method of recovering expenses.

The intent of the report was to provide background information to assist local leaders in their decision-making process.

SUMMARY

The marketing process was the most important component of the 2 1/2 year grant. The implementation of the marketing plan allowed the project to be receptive to consumer demands, economic circumstances and client markets. The promotional campaigns gained statewide and national recognition for the Project.

Before a concept is implemented or a service delivered, it is important to evaluate the long and short-term consequences, understand the decision-making process of the target audience, be prepared for unanticipated events and be ready to implement contingency plans. A grant or program should never short-change the strategic planning process.

RECOMMENDATIONS

1. Provide network participants (libraries) with marketing and public relation skills. The Faxnet Project sponsored a marketing workshop. The Marketing Director of the Denver Public Library was the consultant. The knowledge gained from this seminar was extremely helpful. Something of this caliber should be sponsored at the beginning of a program.

2. Allow sufficient time for strategic planning; do not rush this process.

3. Develop contingency plans to address unanticipated events.

4. Organize ad hoc committees which contain a mixture of individuals to help balance the perspective of the group. For example, the composition of the Fee Development Task Force included an accountant, a telecommunication specialist, business user and librarians.

NETWORKING

When the Montana Faxnet Project was implemented in April 1986, less than 50 fax units existed in the state. If facsimile technology was to be a viable product, methods had to be introduced to educate the users and establish a critical mass. In order build a facsimile network, several programs were introduced. The following are several approaches which were used.

Resource Directory

The Montana Faxnet Directory and Resource Guide was one of the most successful public relation elements. Through it a connection was made with the private sector. The directory included the names of more than 200 Montana organizations owning and operating a fax unit. After the publication process was completed, individual copies were distributed to every site listed in the directory.

The Montana Faxnet Project was the first program in the state to introduce a compiled listing of Montana fax units. This directory assisted with the expansion of the Montana Faxnet Network.

30-Day Trial Plan

Educating people about facsimile technology was a very important aspect of the Faxnet Project. One way to educate them was to provide an opportunity to test the technology.

When the initial equipment plan was developed, a proposal was initiated to secure the use of six facsimile units to serve as temporary demonstration units. A 30-day free trial plan was offered to interested individuals or organizations.

Monitoring the 30-day free trial project required extensive planning, coordinating and scheduling by the Faxnet Staff. To set up the logistics of this program, the Faxnet team and Xerox representatives met on three occasions to clarify roles and responsibilities. The Faxnet Project assumed the responsibility for identifying potential sites and scheduling delivery and removal dates. Local Xerox agents delivered the equipment and conducted equipment orientation and training sessions.

Introduction and follow-up correspondence were sent to each site. Letters contained the name of the local Xerox representative who would be installing the unit and providing the training.

Sixteen establishments participated in this program and 25% of those sites purchased a fax unit.

Discount Pricing

Another tool used to expand the facsimile network was discount pricing. The Faxnet Project negotiated with the Xerox Corporation to allow any organization buying under the auspice of the Faxnet Grant to purchase the fax unit at a discount of $1200, for a savings of $400.

Term Contract

After several state agencies had participated in the five-month demonstration project, it became apparent that there was an interest in facsimile technology. In order to obtain the best price and minimize time involved to process purchase orders, the Faxnet Director initiated the development of a bid process which established a one-year term contract. This process involved the development of specifications to purchase two levels of fax equipment. One level was designed for low-volume usage and the other for mid-volume usage. The contract was finalized in July, 1988. It has been anticipated that 50 facsimile units will be purchased between 1988 and 1989.

Term Contract Extension

Originally the term contract was restricted to state government use. Negotiations with the fax vendor (Harris/3M Company) extended purchasing privileges to county government agencies. This successful endeavor then made it possible for any office or library with county funding to purchase a fax unit.

In order to alert organizations to this purchase plan, the information was published in newsletters that circulated to county offices and libraries.

Alternative Pricing Plans

To market more machines through lower cost per machine, alternatives were explored. Negotiating discounts was one way to make facsimile machines more affordable. Another tool used was association pricing which provided a group pricing discount to members of an association, thereby lowering costs. Local campaigns were introduced promoting the concept of joint purchases. This idea was introduced to cope with economical constraints which forced local organizations to forego the purchase of a fax unit.

There was interest, but no follow-through with this idea because coordinating a fund-drive such as this required extensive local-based planning; human resources were not available to initiate this idea. This could be a viable program, but it would require someone at the local level to conduct a needs assessment, develop a proposal, meet with organizational leaders, negotiate with vendors and finalize the procurement process.

Remote Access

The Faxnet office interfaced its facsimile unit with a personal computer automating all facsimile functions and providing the opportunity to electronically access information stored on the hard disk.

The State Law Library of Montana designed a service which made Supreme Court and Attorney General Opinions available to Montana attorneys. By using a password, an attorney could access and retrieve the information and have it sent to his/her fax machine, or have it forwarded to the nearest fax unit in the community.

The remote access program helped expand the network because it provided yet another means to utilize facsimile technology. It also fostered the growth of the fax market. After the introduction of the electronic access service, fax sales increased in the legal market.

Vendor Cooperation

The Project worked with facsimile sales people to educate them about the Faxnet grant. This education plan gave fax sales people a basis on which to sell machines. This concept served a two-fold purpose by helping the Faxnet Project build a network and helping vendors sell machines. Also, it brought a certain amount of public attention to the Project. In many cases sales people in other states would make mention of the Faxnet grant which in turn initiated a request for information from the Project.

Long-Term Existence

The Montana Faxnet Network is a viable, working system which will expand over the next few years. The Project's longevity has been guaranteed by completing the following tasks:

In order to become owners of the fax equipment, libraries had to provide a one-year commitment to keep the fax unit operating. This commitment time runs from October 1988 to October 1989;

A cost-recovery program was developed to defer expenses which would be generated by the facsimile service;

A statewide policy was compiled to assure consistency for all facsimile transmissions;

The expansion of the network was initiated under the leadership of the Montana Faxnet Project. In order to assure the long-term existence of the network, certain leadership functions were transferred to two coordinators. They will be responsible for organizing an annual meeting during the statewide library convention. The meeting will provide a time for sharing experiences, reviewing policies and making changes; and

Meetings occurred between the Faxnet Project and State Library. Long-term goals were discussed, clarifying the role of the State Library and public library network.

Information Links Established

Network links were established by including existing facsimile sites in training sessions, network communications and workshop presentations. This enhanced the cooperative atmosphere already existing in the State.

SUMMARY

The more fax units were installed statewide, the more marketable and effective the technology became. The Project had to work to develop a critical mass. In 1986 when the grant was first developed, people were not interested in the technology because they could not perceive a need for it. After 2 1/2 years, the facsimile network has become a viable technology in Montana. Libraries are interested and committed to its long-term existence and development.

RECOMMENDATIONS

1. Develop special campaigns. All of the special projects introduced required extensive amounts of time.

2. Introduce discount pricing plans. This fosters good public relations, plus makes the product more marketable to the consumer.

3. Promote a cooperative atmosphere and expand the network by including existing sites in the network.

PUBLIC RELATIONS

After the marketing plan had been finalized, a public relations campaign was implemented which addressed a graphics package, communication and educational plan, outreach campaign and a partnership development project.

Graphics Package

Portraying a professional image was important for the Faxnet Project. Therefore, a professional artist designed a logo, letterhead, business cards and a brochure. The logo design used on all of the above formats signified a unique business-like quality which helped promote the grant in a positive and professional manner.

EDUCATIONAL PLAN

Educating the public about facsimile technology became the most important and time-consuming component of the public relations campaign. People did not know or understand the concept of this technology. A great deal of time had to be spent clarifying the terminology, defining applications and promoting its potential. Every form of communication (letters, brochures, press releases) had to include a definition and explanation of the technology. The educational plan also included two slide shows.

Slide Shows

Two different slide shows were developed, one by a graphic artist and the other by the Project Director. The program organized by the professional artist outlined the purpose of the grant, target audiences, geographical barriers and the long-term goals.

The other slide show incorporated background information and photographs of the informational sites providing statewide access to its collections. This educational element had been designed to enhance the reference skills of librarians plus educate the general public. The slide show was presented to librarians and professionals during October, 1987.

Educational Packets

An educational packet was compiled outlining the services, collections, staff and protocols of every library owning and operating a facsimile unit. These one-page forms were incorporated into a handout which was distributed during the October seminars.

Public relation packets were also developed and distributed to every demonstration site. The public relation packets consisted of information designed to assist local representatives in identifying and promoting the technology, writing press releases, developing posters, targeting clients and operating equipment.

Cover stories and other interesting articles were distributed to libraries which enabled them to keep abreast of the market and obtain national viewpoints.

Equipment manuals were compiled for internal use. It was important that the staff be well educated about fax services, statewide networks, basic equipment operations and reference numbers (service calls, supply orders, customer support).

Instruction sheets were developed for basic machine operations. The Project found it helpful to have a "cheat sheet" posted by each fax unit to assist individuals new to the agency or those unfamiliar with the equipment.

COMMUNICATION PLAN

The Faxnet Project developed a communication plan for all network participants which included the advisory board, field representatives, general public, identified client sectors, other telecommunication projects and Montana libraries.

Table I itemizes the method and frequency of communication elements.

TABLE I
COMMUNICATION PLAN
METHOD

GROUP	NEWS LETTERS	PRESS RELEASES	FAX DEMOS	BUSINESS LETTERS	TELEPHONE	PROJECT REPORTS	FAXNET BUSINESS
BOARD	O		$		X	%	O
LIAISONS/FIELD	O		O	$	X	%	X
GENERAL PUBLIC		%	$		X		
CLIENT SECTORS	O	%		$	X		X
OTHER PROJECTS	O	%		$	$		
MONT LIBRARIES	O	%	$	$	$		$
FOUNDATION	O	%		$	%	%	

X = WEEKLY O = MONTHLY # = BI-MONTHLY % = QUARTERLY $ = AS NEEDED

Newsletter

The Montana Faxnet Project published a monthly newsletter, The Faxs of Life which was distributed to board members, demonstration sites, other telecommunication projects and Montana libraries which owned a facsimile machine.

The newsletter contained field anecdotes, monthly statistics, human interest stories, new facsimile numbers and other general communications.

Press Releases

After a demonstration machine was installed, the site issued a press release. Every time the machines rotated, the Faxnet Project received statewide coverage. These press releases provided information to the general public, educating them about the technology and the library's fax service.

The media produced a total of 40 Faxnet stories. The Project also received national coverage in the USA TODAY paper. Three major stories were also published throughout the course of the grant.

When the fax units were located in the business and law sectors, coverage was minimized because some site representatives did not actively promote the system.

Demonstrations

Facsimile demonstrations were used to educate the general public. As once stated, "one picture is worth a thousand words," providing visual demonstrations was the most effective means to teach facsimile technology. The Project office would schedule demonstrations with each location at least twice a month. The field sites would schedule public demonstrations which would require the assistance of the main office.

Telephone

Large amounts of telephone time were required. The Montana Faxnet Project identified one person at each site to be responsible for receiving and disseminating all information. For example, when a series of statewide seminars were being organized, it required 3 to 4 telephone calls per site to finalize all logistics. The telephone was used to handle problems, provide technical back-up and disseminate reference information.

Project Reports & Letters

Every interim report compiled was distributed to site representatives, advisory board members and the Foundation staff as another way of increasing network communications.

Business letters were used to introduce new projects, complete requests for information and provide general project information.

Faxnet Business

In order to maximize the use of the technology and familiarize organizations with its potentials, all administrative communication (agenda, memos. protocols) were transmitted via the facsimile network.

Facsimile transmissions also were sent to other libraries that owned and operated a fax machine. Sharing information with other facsimile sites assisted in the expansion of the network and developed a cooperative atmosphere.

PARTNERSHIP DEVELOPMENT

The Faxnet Project actively developed partnerships with the Xerox Corporation, Montana Health Network, Helena libraries and the Montana Bar Association. The creation of partnerships allowed the Project to maximize its financial resources. On two occasions, the Xerox Corporation shared the production costs of seminars. Xerox also sent regional representatives to present technical information at these seminars.

In October 1987, 8 statewide seminars were sponsored by the Faxnet Project, State Law Library, Shodair Medical Library and Montana Health Network. These organizations shared travel expenses which made the 1500 mile trip economical for all parties involved.

The Montana Bar Association granted the Law Library $1000 which defrayed expenses for the legal seminars presented by the Law Library and the Faxnet Project.

The State Law Library and the Faxnet Project shared printing and mailing costs involved in the production of the 1988 seminars.

Creating a partnership with private and non-profit organizations was an excellent public relations tool. The benefits gained from that experience helped position libraries in the professional arenas, develop new contacts and pool resources. For example, a nationally known public relations firm used by the Xerox Corporation made contacts with the Faxnet Program and wrote articles that resulted in a national award and national coverage in USA TODAY.

OUTREACH

The outreach component involved the sponsorship of programs at the local level. These programs included orientation sessions and seminars. These contacts established a positive rapport between local representatives and Faxnet personnel.

The outreach programs contacted approximately 1500 individuals which included a composite of librarians, students, educators, lawyers, professionals, legislators and out-of-state contacts.

Orientation Sessions

A total of 55 orientation sessions were conducted, one per site. Topics of discussion included an overview of equipment operations, bookkeeping procedures and public relations campaigns. The initial meetings established rapport, developed trust and ensured commitment. Ideally, two on-site visits should have been made, but due to the size of the State, only one was feasible. The second on site visit was replaced with extensive telephone follow-up to review equipment operations, clarify policies and provide reassurance.

SEMINARS

A total of 27 seminars were conducted over the 2 1/2 year grant period. The workshops were designed to educate individuals in the areas of facsimile technology, informational databases, online searching techniques and state and national information networks. The most successful seminars were titled Information for Health, Justice & Profit and The Competitive Edge.

Information for Health, Justice & Profit

This seminar was co-produced by the Faxnet Project and the Xerox Corporation. The target audiences included professionals from all sectors (legal, medical, governmental, educational, business). The topics discussed were document delivery systems, computer and facsimile technology and database searching.

The style and content were altered depending on the presenters and the audiences. This seminar was presented to six rural sites and two Helena locations. Various information specialists presented overviews about state and national resources, electronic information and circulation policies.

The Competitive Edge

Another very successful workshop targeted 1700 Montana attorneys. This seminar addressed online database searching, document delivery systems and electronic storage of Montana Supreme Court and Attorney General Opinions. The workshops were presented at 15 libraries. This seminar was sponsored by the State Law Library of Montana and the Montana Faxnet Project.

October Seminars

During October 1987, 8 workshops were sponsored. A team of Helena librarians including the Faxnet Director conducted seminars covering the topics of document delivery, WestLaw, Lexis, and Medline database searching. A slide show outlining other Helena-based library services was also presented. These outreach programs targeted individuals working in rural communities. The intent of these seminars was to educate professionals about local, state and national information networks, circulation policies (how to access and retrieve information located outside the community) and document delivery networks.

Many individuals residing in rural areas did not know how to access and retrieve information because they were unaware of interlibrary loan procedures. After the October workshops, the Helena libraries noted an increase in usage from those rural areas.

OTHER PROJECTS

The Montana Faxnet Project also played an active role in conferences, panel discussions and public speaking engagements.

Statewide Representatives

Another element of the outreach segment involved selection of local representative who acted as a liaison between the demonstration site and the Faxnet Office. Incorporating local representation fostered a feeling of commitment and ownership in the network.

Partnerships

Professionals from facsimile companies were included in outreach efforts. They played a key role in the education process, because individuals from facsimile companies would make mention of the Montana Faxnet Project. This method promoted sales for the organization and publicity for the Project. On several occasions requests for information came in from out-of-state clients who had heard about the Project from a vendor.

Connections made with other non-profit organizations resulted in the publication of articles in newsletters.

SUMMARY

The public relations program fostered the growth and development of the Montana facsimile network. It educated people, developed credibility, established state and national contacts and expanded the Montana facsimile network.

RECOMMENDATIONS

1. Develop, budget for and promote an active public relations campaign. It is extremely important, particularly when introducing a new concept.

2. Design a budget which allows for sufficient communication expenses. Extensive telephone calls were required to develop and maintain the network.

3. Compile a communication plan to organize and monitor the flow of information.

4. Organize outreach programs which utilize the expertise of different professionals. The seminars which included more than one speaker were well received.

5. Sponsor several outreach programs. The on-site visitations were very effective.

6. Develop partnerships with corporations and agencies. This type of partnership produced a win/win situation for all involved.

7. Strive to achieve a professional quality in all public relation products.

8. Design creative text when sponsoring seminars. (See Appendix E)

9. Develop marketing tools which will increase attendance. For example, the legal seminars offered Continuing Legal Education credits.

STATISTICS

Project Analysis

The Montana Faxnet Project analyzed the effectiveness of facsimile technology by monitoring the following indicators:

Volume
Sector Comparison
User Demographics
Exit Interviews
Turnaround Time

Volume

The equipment testing phase of the grant lasted 18 months demonstrating fax units in 48 different libraries and organizations. Every five months the fax machines were rotated to a new client sector.

Table II outlines demonstration periods, sectors and clients.

TABLE II
DEMONSTRATION PERIODS

DATE	SECTOR	CLIENT
1/87 - 5/87	GOVERNMENTAL (LEGISLATIVE PROJECT)	LEGISLATORS, LOBBYISTS, CONSTITUENTS, JOURNALISTS
6/87 - 9/87	BUSINESS/LAW	DISTRICT COURTS, CHAMBERS OF COMMERCE, MONTANA LEGAL SERVICE PERSONNEL
10/87 - 3/88	HEALTH/EDUCATION	RURAL & URBAN HOSPITAL ADMINISTRATORS, ADULT EDUCATION DIRECTORS & COUNSELORS
4/88 - 7/88	PUBLIC LIBRARIES	GENERAL LIBRARY PATRONS PRIVATE BUSINESS PEOPLE

During the 18 month demonstration phase, a total of 23,334 pages were transmitted.

The total volume generated by each site was used as an indicator of the effectiveness of the facsimile system. The sites producing the most volume were also sites that adopted the technology.

Table III on page 28 compares the percentages of volume generated by each sector. The Health/Education sector produced the highest volume. The one group responsible for the high production rate was the Montana Health Network, generating twice as much volume as the educational sector.

The next highest volume rate was generated during the Legislative Project which transferred written testimony to the State Capitol.

The Business/Law group produced the lowest amount of volume, as has been stated, since the client sectors did not perceive a need for the technology.

It is anticipated that the public library group will experience a growth in volume. These sites are now the permanent owners and will be coordinating public relation campaigns to introduce facsimile technology to patrons. Library personnel will also actively use the technology to conduct administrative communications and daily library services.

Table IV compares the differences in total volume produced between the field sites, Helena locations and Faxnet Office.

TABLE IV
SECTOR COMPARISON
JANUARY 1987 - JULY 1988

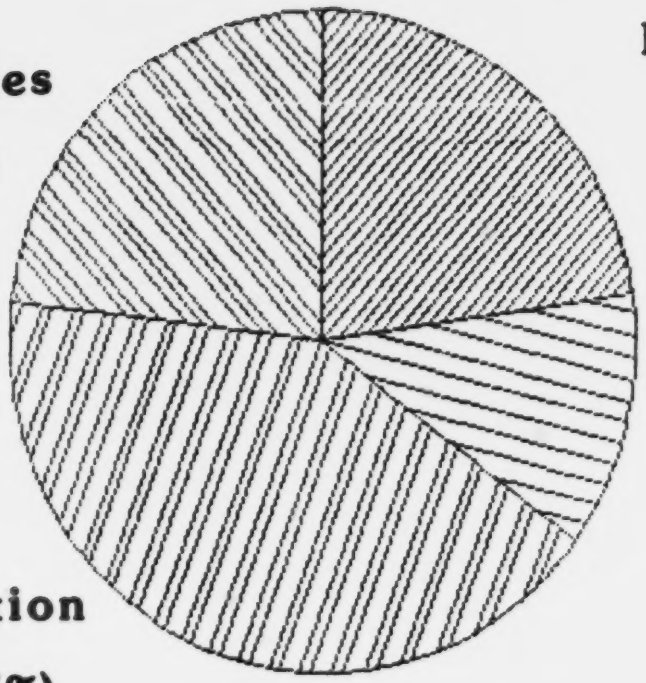
MONTH/YEAR	SECTOR	FIELD SITES	HELENA SITES	FAXNET PROJECT	TOTAL PAGES SENT
01/87 - 05/87	Legislative	2813	1846	634	5293
06/87 - 09/87	Business/Law	1291	1036	561	2888
10/87 - 03/88	Health/Education	4542	4415	764	9721
04/88 - 08/88	Public Libraries	1946	2701	785	5432
	TOTALS	10592	9998	2744	23334

Field usage recorded all pages transmitted from each site. As indicated, the Legislative Project and Health/Education group were highest volume producers. Both of these sectors were committed to the concept and both had a service or a theme which provided a basis to promote the service.

TABLE III

MONTANA FAXNET NETWORK

January 1987 - July 1988



During the Legislative Project, field sites provided a free service whereby constituents could fax testimony into the State Capitol. This was a very successful program.

The Health/Education group had an existing network which communicated on a regular basis. For example, the health group consisted of rural hospitals belonging to a consortium; the education sector involved a college teacher who directed an adult education program which served several rural communities. Because a communication system already existed for these sectors, the fax technology was able to provide additional communication tools which enhanced the transfer of information.

The Legal sector did not offer a specific service. Legal colleagues worked in other offices, but this group did not take advantage of the technology. The Business section (Chambers of Commerce) served a network of local businesses, but due to internal personnel problems, the technology was not actively promoted. Therefore, the technology was not used to the same degree as in other categories.

After all demonstration phases were completed, public libraries became the permanent owners of the equipment. Volume will increase over a period of time because library staff will initiate a public relations campaign; also by becoming a permanent service, local residents will utilize it on a more frequent basis.

The volume produced at the Helena sites fluctuated from sector to sector. The largest amount (4415) occurred during the Health/Education trial period. This increase may have been due to the educational and awareness campaign which was sponsored and presented by the Helena-based sites. The State Law Library noted a significant increase by rural patrons after the October 1987 seminars had been completed.

The Montana Faxnet Project maintained a consistent flow of volume. Changing the sectors did not affect the transfer of information, because most communications were of an administrative status, designed to coordinate and communicate with each field site.

User Demographics

Statistics were gathered to determine categories of use. Forms were designed to monitor categorical usage. The categories monitored were private, administrative, business and educational research, general library uses, and medical and legal research.

The private component recorded non-library related transmissions which included business correspondence, contracts and bids.

The administrative element monitored communications which were administrative in nature. These included office memos, agendas, schedules of meetings, purchase orders, letters, directives, etc.

The business, educational, medical and legal categories tracked the research work done for professionals.

The general library segment monitored interlibrary loan and general reference services which were completed via the telecommunications system.

Table V compares the individual volume amounts generated under each category.

TABLE V
CATEGORY COMPARISON
VOLUME TRANSMITTED
JANUARY 1987 - JULY 1988

	1/87 - 5/87	6/87 - 9/87		10/87 - 3/88		4/88 - 7/88	1/87 - 7/88	
CATEGORY	LEGISLATIVE	BUSINESS	LAW	HEALTH	EDUCATION	PUB LIBRARY	HELENA SITES	TOTAL
PRIVATE	1148	155	14	298	301	799	2052	4767
ADMIN	750	406	13	2340	280	359	2714	6862
BUS RES	--	388	0	--	--	65	93	546
EDUC RES	--	--	--	49	230	39	134	452
LEG RES	--	55	23	41	26	57	878	1080
MED RES	--	--	--	287	13	37	596	933
LIB GEN	764	75	13	132	455	479	2722	4640
INTER	43	32	0	6	1	46	289	417
DEMO	108	95	22	36	47	65	520	893

The total volume (excluding Faxnet communication) accrued was 20,590.

The section which had the highest volume of use was the administrative category which transmitted 33% of the total volume.

The private category accumulated 23% of the total and general library activities entailed 23% of the total volume accrued.

The international and demonstration categories generated 6% of the total volume.

The educational, legal and medical research segments equaled 15% of the total.

The writers of the grant designed the network to improve the delivery of information between a library and patron. The unexpected growth of the administrative and private realm was not anticipated.

The private usage created by consumer demand has been an area which certain libraries will continue to develop by creating an active outreach program. The private program has introduced new patrons to library programs. In certain instances some libraries will initiate a cost-recovery fee to charge against non-library related transmissions.

Two statistical indicators used to measure the benefits of facsimile technology were monitoring volume and categorical usage. The statewide telecommunication network has been well received by Montana libraries. It has opened a door to provide a new service to the business community and has provided a method to rapidly transmit information.

Exit Interview

The Project conducted exit interviews at demonstration sites in order to monitor policies and review recommended charges, record field perceptions and gather statistical data. Applicable sections have been included in the statistical portion of this report.

A goal of this grant was to increase a library's credibility and visibility in its community. The Project wanted to determine if the introduction of a new technology would increase the number of patrons using the library and if new users could be persuaded to use the library.

Seventy-five percent of the sites noted an increase in patron traffic and when asked if the fax service drew a new clientele, 83% said yes.

With the introduction of the fax service, new patrons began to use the library, initially to transmit business and personal materials and later to utilize other library services. Following are some anecdotes quoted by librarians:

> It was an excellent public relation tool for intergovernmental relations;
>
> We did realize an image change;
>
> It brought people to our library that had never been there before, it was a great outreach tool; and
>
> The city administrator frequently used our machine during the 1987 Legislative Session. He recommended that the city purchase a fax unit and place it at our library (this was done).

Not only did the library's fax service increase the number of patrons, it also acted as a catalyst for an image change; people began to expand their view of the library as a technical support center which could offer professional expertise.

When asked about the future of facsimile technology, 85% indicated it would be used on a frequent basis and 15% stated that the service would not receive much use.

Another point addressed in the exit interviews involved two fee-based programs for using the facsimile service. The two fees addressed were a library to library service and a courier program (non-library related transmissions).

Library to Library

When using the fax unit to transmit library materials, 77% stated that it should be free and 23% said a minimal fee should be assessed.

Courier

The courier service targeted the private business person and included the sending and receiving of non-library related information (bids, contracts and business correspondence). All respondents agreed that some fee should be charged for the courier service; 31% said the telecommunications expense should be charged against the patron's credit card, 23% indicated there should be a $.50 per page charge, 8% said $1.00 per page should be collected and 38% said it should be a combined charge using a telephone credit card and a minimal fee.

The exit interview process also monitored the communication charges generated at each site. Each site had a $150 communication grant, but only one of the 48 sites reached its maximum limit. The funds expended for field communications ranged from $6.00 to $150.00. The average amount paid out was $35.50 per month.

The exit interviews concluded that public relations was a key component. Libraries developing and promoting the most active campaigns generated the highest volumes, experienced the largest increase in patron use and increased visibility within the community.

Turnaround Time

A form was designed to monitor turnaround time. (See Appendix F) The format was designed for use in a library setting to monitor interlibrary loan services. As the Faxnet demonstration program progressed, it became apparent that the fax systems were not being used to access and retrieve library information to the degree anticipated. Instead the majority of the transmissions involved administrative and private use. For example, only 21% of the total transmissions involved library related service; administrative and private usage amounted to 60% of the total volume. A combination of low interlibrary loan usage, the small number of library settings, and failure by library staff to consistently monitor turnaround time meant there wasn't enough information for a valid statistical sample.

Other factors affecting low collection rates were an insufficient number of library settings, inconsistent monitoring methods at the local level and an unanticipated use of the service.

User Evaluation Form

The user evaluation form was designed for a library setting.(See Appendix G) When fax units were demonstrated in the non-library organizations (chambers, district courts, legal services, corporations, hospitals) the information flow did not involve a request for library materials; the information transfer was restricted to a sender and receiver. There was no middleperson (librarian) to facilitate an information request. The forms were designed to track the turnaround time after the patron initiated the request.

Unanticipated Use of the Service

When the grant was implemented, no one anticipated that private transmissions would surface to be one of the main uses of the facsimile network. The courier service provided urban professionals with the opportunity to deliver critical business information in a matter of minutes. Because of this ability to have a rapid turnaround time, many business people saw facsimile technology as an alternative to Federal Express. In rural areas, where Federal Express Services did not exist, the fax program became a popular program which was used on a frequent basis.

The evaluation form was not designed to collect data for the courier based program. However, the courier program serving the private sector generated the second largest volume of output.

Information Collected

Turnaround time information was collected using the Information Request Form. Of the information forms collected, only 50 were completed correctly. The breakdown of turnaround time was as follows:

31% received requested information in less than 1 hour
21% received requested information in 2 hours or less
6% received requested information in 3 hours or less
1% received requested information in a 6 hour period
* 39% received requested information in a 1 day period

* The 39% reflects information which was retrieved from out-of-state resources.

If a library did not hold the information or it was too voluminous, a faxed response was immediately sent to the requesting library acknowledging receipt of the request and action taken.

The turnaround time dramatically improved for Montana residents. Prior to the implementation of the facsimile network, individuals were forced to wait between one and four weeks.

A policy compiled by the Montana Faxnet Project and network participants incorporated original policies and protocols, and recommended a 6 hour response period be followed.

User Evaluation

User evaluations were designed to measure a patron's satisfaction level. This survey tool was used in conjunction with the information request form.

Prior statements indicated that an insufficient number of library request forms also affected the response rate of the user evaluation instrument.

A total of 50 information request forms were collected, but only 35 user evaluation surveys were returned. It was the patron's responsibility to complete and return the form to the Faxnet Office.

The user's survey asked the following questions. Percentages have been tallied for each question.

Question 1 - The information received was the information requested.

Response -	1 - highly satisfied	84%
	2 -	6%
	3 - satisfied	3%
	4 -	--
	5 - not satisfied	3%

* 2 no responses to #1

Question 2 - Were you satisfied with the speed of information delivery.

Response -	1 - highly satisfied	86%
	2 -	14%
	3 - satisfied	--
	4 -	--
	5 - not satisfied	--

Question 3 - Were you satisfied with the legibility of the document(s).

Response -	1 - highly satisfied	72%
	2 -	17%
	3 - satisfied	11%
	4 -	--
	5 - not satisfied	--

Question 4 - How many people used the information that was delivered?

Response -		
	1 -	49%
	2 -	17%
	3 -	8%
	4 -	--
	5 -	26%

Network Expansion

The expansion of the technology in Montana is yet another indicator of the effectiveness of facsimile technology. Since the inception of the Project in 1986, the Montana fax market has increased by 75 percent.

The Faxnet Program sponsored the purchase of 16 fax units and compiled a government contract which will initiate the procurement of 50-75 units (statewide).

After the demonstration period ended, the Project witnessed the development of the following networks:

Eastern Montana	8 Hospitals
South Dakota	5 Hospitals
Montana Libraries	4 Locations
State of Montana	50 Agencies
Law Firms	10 Organizations
Educational Sites	2 Organizations

SUMMARY

Analyzing the effectiveness of the document delivery network was based on total volume generated, total number of machines purchased, networks established, private sector usage and field anecdotes.

The technology has been well received in Montana and it is anticipated that the facsimile market will continue to expand in Montana.

RECOMMENDATIONS

1. Design appropriate survey instruments. Obtain assistance from professionals.

2. If feasible, utilize specialized individuals (graduate students, professors) to assist with the statistical analysis. This position could design evaluation tools, teach collection methods, monitor the entire process and compile data.

3. Obtain input from individuals working in the field. Their advice will be valuable in the design of evaluation formats.

CONCLUSIONS

The value of library resources was enhanced through the use of facsimile technology. The groups most affected by the technology were the medical and legal sectors. These professionals utilize interlibrary loan services more frequently than educators or public library patrons. (See Table V)

Public relations and outreach campaigns must be performed by libraries. Many statewide patrons were unaware of interlibrary loan services. Many individuals did not realize that library resources could be obtained from collections located outside the parameters of the local community. In order to market rapid delivery of information and interlibrary loan services, libraries must educate patrons about interlibrary loan concepts and document delivery systems.

By installing up-to-date technology, libraries realized a image change. Patrons began to understand that local libraries went beyond recreational reading centers.

The facsimile services also increased the volume of patrons and established a new clientele of users which had never used the library prior to the introduction of the facsimile technology.

The courier service which emerged as a result of the facsimile program developed a new connection with the business community. The fax program provided community leaders with the opportunity to rapidly transfer important business documents, a service which, in many cases, had never existed prior to the implementation of the document delivery network. Local business people generated the second largest amount of volume. The courier service provided libraries with the opportunity to implement a cost-recovery or revenue enhancement program. The consumer demand was prevalent, particularly in rural communities.

The marketing and public relation campaigns were successful, generating state and national news coverage, a national award and many requests from national locations. A letter received from the Kansas State Library stated the Montana Faxnet Project was very innovative and creative in its use and promotion of facsimile technology.

The transfer of information was improved for the library patron using interlibrary loan services and for the private individual transferring business documents.

During the 1987 Legislature a statewide system was implemented allowing for the transfer of written testimony into the State Capitol. Because of the successful 87 project, this program will be re-instituted during the 1989 Legislature.

Another area of impact involved the medical sector. After testing Faxnet equipment, eight hospitals and one clinic purchased fax machines. Also, after monitoring the results of Montana's medical group, five South Dakota hospitals installed facsimile equipment.

The Faxnet Project served as a model. Over 15 states have requested information from the Faxnet Office.

The Faxnet Project impacted information transfer on a state and national basis. As result of the Faxnet Program, certain informational networks expanded communication links with new and existing organizations. The following are examples:

The State Law Library implemented a program which allowed Montana attorneys to electronically access Montana Supreme Court and Attorney General Opinions.

Through a grant process, four branch libraries received fax units, which allowed them to communicate with headquarter locations who also owned facsimile machines. This link aided in the transfer of library and administrative communication.

Information links were established between the Montana Department of Commerce and Japan. Telefacsimile equipment became a communication tool used on a daily basis.

In Eastern Montana a consortium of 8 hospitals linked together using facsimile technology. That network was used to transmitting association business, patient records, internal use (supply orders, contract negotiations).

Creating partnerships with the private sector proved to be a very effective public relations tool. The Montana Faxnet Project benefited in the areas of state and national media coverage, revenue sharing and increased visibility.

The Montana Faxnet Project published a directory of Montana businesses and organizations owning and operating facsimile machines. This was a successful endeavor and tentative plans are being considered to publish a second edition.

In order to develop the library's facsimile service to its fullest potential, patrons should be educated about the concepts of interlibrary loan services and document delivery systems.

Facsimile equipment did become a viable and effective technology for the State of Montana. The Project was responsible for promoting the technology in medical, governmental and legal sectors. After the introduction of the technology, many organizations purchased fax equipment.

**** APPENDICES ****

APPENDIX A

November 24, 1987

Dear Applicant:

The Fred Meyer Foundation awarded a two year demonstration grant to the Montana Faxnet Project in order to show the use of telefacsimile equipment in document retrieval. Telefacsimile or fax machines transmit hard copy over the telephone lines to another fax unit. There are 22 fax machines from the grant project and many others throughout the state and the nation. Throughout the course of the grant, the fax units have been tested in business, legal, medical, educational and government settings. These test sites have had the opportunity to determine the usefulness and effectiveness of fax technology.

In March 1987, the Faxnet Project applied and received a six (6) month extension grant for additional funds. It is the intent of the extension grant to maintain the fax network in Montana. The extension grant proposed that a network would be set up using public libraries in Montana. Public libraries were chosen because the libraries are accessible to the community as a whole. Also, public libraries are open at hours that are convenient for all aspects of the community.

In order to set up this permanent network, criteria and an application form have been developed. There are 16 fax machines to be placed. Successful libraries will receive training in marketing, networking and community organizing. Seminars, on-site training, and on-going technical assistance will be available for each site during this six-month period (April 1988 through September 1988).

It is important to maintain the telefacsimile network developed by the Montana Faxnet Project. The network has been used by different individuals, organizations and libraries. The uses of the fax network are as varied as the users. It has and will continue to provide Montanans with an opportunity to communicate with colleagues, receive reference assistance, to do interlibrary loans, etc. The Fax machine will diminish the geographic isolation that all professionals face in rural communities and should assist in the identification of the public library.

Please review and complete the enclosed packet. If you have questions or need clarification, please call me.

Best regards,

Linda Brander
Project Director

LB/dmg

Through a grant process, the Montana Faxnet Project will select sixteen public libraries and or federation headquarter libraries to become permanent owners of the facsimile equipment. Final transfer of ownership will be based on approval from the Fred Meyer Charitable Trust and completion of contract obligations.

In order to be eligible each library must meet mandatory requirements. After all requirements have been completed, the applicant will be evaluated on a set of criteria which has a point value assigned to each question.

The Montana Faxnet Advisory Board will evaluate all applications. The Montana Faxnet Director will not be an evaluator.

Each criteria question has been assigned a numerical value. The libraries with the highest scores will be the successful applicants.

The deadline to submit applications will be January 15, 1988. Successful libraries will be notified by February 8, 1988.

The Montana Faxnet Project reserves the right to reopen the process if an insufficient number of public libraries apply.

In order to be considered applicants must:

1. Complete the Mandatory Requirements

2. Complete the Criteria

3. Send Letter of Support-Regarding Financial Support and Administrative Commitment

   This letter must have the signature of the Chair person, Board of Trustees, and the Library Director.

Send application package to:

Montana Faxnet Project
c/o State Law Library
215 North Sanders
Helena, MT 59620

The following mandatory requirements must be met in order to be considered in the evaluation process.

The following mandatory requirements must be met in order to be considered in the evaluation process.

MANDATORY REQUIREMENTS

1. The library shall encourage maximum use of it's fax service.

   The following are ideas to encourage use of your fax service:

   a. Demonstrate the technology to library board, community businesses, local government officials, civic groups, etc;

   b. Write article in local newspaper inviting use of your fax service;

   c. Spread the news by word of mouth;

   d. Speak at various groups; and

   e. Send letters of invitation to groups (e.g. those listed in a).

2. The public library must pay for all fax telephone charges. It will be at the discretion of each library whether a fee for non-library-related service is to be assessed.

   The Montana Faxnet Project has been documenting facsimile transmission costs. The per page facsimile transmission has ranged from 22 to 48 cents per page during daytime sending. A site can further decrease it's overall communication costs by sending after 7 P.M. or on weekends. It is anticipated the average monthly communication charges will be $20/month or less.

   Members of the general public can be charged a fee or place the fax transmission on their credit card.

   During the six-month period(April 1, 1988 to September 30, 1988) libraries shall not charge library fees to participating Faxnet sites. Other library and non-library fees can be assessed at the discretion of the library.

The Montana Faxnet Project will furnish two rolls of thermal paper which will be sufficient to complete the six-month demonstration period. After the library becomes the permanent owner, it will be it's responsibility to furnish all supplies. Supplies will include thermal paper $10/roll or $40/case (6 rolls) plus shipping and handling. Each roll will furnish approximately 150 copies; no paper is used when documents are sent. Successful applicants must purchase a minimum of two rolls of paper to guarantee that the fax unit is in working order for a minimum of one year.

3. The site will not be responsible for equipment maintenance during the demonstration period (April 1, 1988 to September 30, 1988). At the end of the six-month period, each site must maintain the fax unit in working order for a period of one year.

In order to provide equipment maintenance, the site has two service options:

The first is a maintenance contract costing $57.50 per quarter. This contract will cover parts and labor; and

The second option is no contract, and the site pays for labor and materials on a as needed basis. The labor is $85/hour and parts can cost from $10 to $900.

The Montana Faxnet Project would encourage the site to purchase the maintenance agreement. The Project has had to replace a circuit board ($868).

4. The library must designate and send one staff member to participate in a one and a half day seminar to be presented by the Montana Faxnet Project. The staff person must attend all scheduled sessions.

The Project will pay for travel, lodging and meals for one individual to attend in Helena. If there are other individuals attending from the surrounding areas, the Faxnet Project will encourage individuals to share rides.

The Project will not pay any substitute fees for coverage of your library while the staff member attends the seminar.

The seminar dates will be:

April 26 12:00 pm to 5:00 pm
6:30 pm to 9:00 pm (social event)

April 27 8:00 am to 5:00 pm

5. The public library must participate in a public relations campaign. A training and public relations package will be developed by the Montana Faxnet office; individual input will be gathered and incorporated into the package.

The seminar will review marketing and public relations ideas and concepts. After the seminar, each library must develop and conduct a public relations campaign, which will be applicable for it's community. The seminar will provide time to organize a campaign, share ideas with colleagues, and brainstorm possibilities.

6. The public library must agree to perform a set of incentives that have been mutually developed by the sites and the Project. The library must complete the incentives in order to become the permanent owners.

The incentives to be completed will be the same for all sites.

The obligations will be developed using a group process (which may occur during the April 88 workshop).

7. The public library must have a single line telephone. A fax unit will not operate on a multi-line telephone. The public library must have the telephone line installed by April 1, 1988.

In order for a facsimile unit to operate, a single line telephone with an RJ-11 Jack is required. If a library must install an extension line the approximate cost will be $50.00. If your site wants a dedicated line, the approximate installation charge is $100.00; when using a dedicated line, monthly equipment charges must be taken into account (approximately $50.00/month).
It is important to note that a dedicated line is not needed. The fax unit can be used on your regular business line where both voice and fax calls can be processed.

8. The public library must keep statistics for the Montana Faxnet Project. Statistical information (volume, user background, type of use) will be included in the Project's final report. The site must submit a brief report by August 1988. The report outline will be developed by the Faxnet Director. It will be an outline format, and will not require extensive writing.

9. If applicable, the public library must have two people trained in the basic operations of the facsimile unit. Training will be provided by the Faxnet Director.

10. The public library should be open convenient hours (convenient hours shall be defined as 50% of normal business hours which are between the hours of 9 AM to 5 PM).

    The fax unit must be accessible to the public which means the staff must fax the public's document(s) within a four hour period. The library staff should perform the transmission. It is recommended that urgent materials (i.e. medical info, business bids meeting deadlines, authorizations) be faxed immediately.

MANDATORY REQUIREMENTS

Please complete the following questions. Check the appropriate blank. All Mandatory Requirements must be completed before the applicant can be evaluated.

	YES	NO
1. Will your library encourage the fax service to be utilized as much as possible?		
2. Will your library's budget be able to absorb monthly communication charges amounting to approximately $20.00 per month?		
3. Your library agrees not to charge any library-related fees to participating Faxnet Sites?		
4. Will your library purchase two rolls of thermal paper costing $10/roll plus $1.65 shipping and handling?		
5. Will your library guarantee machine operation and maintenance (via maintenance contract or parts/labor fees) for a period of one year, starting October 1, 1988 to October 1, 1989?		
6. Will a staff member from your library attend the Helena seminar and attend all planned sessions?		
7. Will your library conduct a public relations campaign in order to market your fax service?		
8. If a successful applicant, will your single-line telephone be ready by April 1, 1988?		
9. Will your library staff maintain monthly statistics?		
10. Will your library director or designated staff member complete and submit a brief typed report by August 1988?		
11. Will you assign two staff people to be responsible for facsimile operations?		
12. Will your library allow the public to use your fax service during designated working hours?		

	YES	NO
13. When using the fax service as a courier for the general public, will you guarantee that materials will be faxed within four working hours?		
14. When the information to be sent is urgent, will your staff perform the transmission immediately?		
15. Please list your hours and days open:		

LIBRARY DIRECTOR

TRUSTEE CHAIRPERSON

Please complete the following questions. Each question has been assigned a numerical value. Evaluators will rate each question, based on written responses. All applications will be "blinded", which means the evaluators will not know the name of the library as they process the responses.

CRITERIA

for office use only

Applicant # _____

_____ 1. How would your community benefit by having a fax unit placed at your library? (possible points: 10)

_____ 2. How will your library encourage the use of facsimile technology? Please give specific methods. (possible points: 10)

3. After the Faxnet Project ends, what role will your library play in order to assure the long-term existence of the statewide document delivery network?
(possible points: 5)

APPENDIX B

PURPOSE

The purpose of the Promotional Task Force is to educate, create and develop innovative ideas which will promote, educate and foster the long-term existence of the Montana Faxnet Network. A promotional campaign will strive to maximize the visibility of the public library in the information market place.

PRODUCT DEFINITION

The product is a service which provides for the rapid delivery of information. The product has three distinct categories which include a library to library service, a courier program and a remote access service.

LIBRARY TO LIBRARY SERVICE

This fax service involves the rapid delivery of printed information (excluding a complete volumes of a book) from a lending library to a borrowing library.

COURIER SERVICE

This fax service involves the sending and receiving of printed materials which are of a personal or business status. Such items would include bids, contracts, purchase orders, correspondence, grants, financial statements, advertising, lay-outs, etc.

REMOTE ACCESS SERVICE

This service allows remote users to electronically access and retrieve printed information stored on a personal computer at the State Law Library.

GOALS

The following promotional goals have been developed.

LIBRARY TO LIBRARY GOALS

1. GOAL

   Orient, train and educate the library staff in the areas of equipment operation, facsimile technology and facsimile applications. By educating the library staff, they can better serve and educate the library patron.

   OBJECTIVES

   Have staff perform several "practice" send and receive functions on the fax unit.

* Compile an instruction or "cheat sheet" which outlines basic operational procedures.

Review policy and procedures with your staff and post the document near the fax unit.

Educate staff on the potential applications which would be sent via the fax network. An outline defining potential applications has been sent to each Library Director.

Have staff record anecdotes and applications not listed in the Faxnet Report.

Educate library staff about other state and national fax networks which exist. Use the state and national directories.

Post fax numbers by the telephone. In this way staff will be well-informed when communicating with library patrons.

Share with your staff newspaper and journal articles which involve fax technology.

* Develop a fax file where specialized information can be placed. Some articles will be delivered by the Faxnet Office.

2. GOAL

Identify and educate library patrons about facsimile technology, networks, applications and state and national resources.

OBJECTIVES

* Design a flier which describes technology, networks, applications and state and national resources.

Distribute flier to all patrons.

Conduct demonstrations to professional and civic groups. Tell them what facsimile technology means to them as a library user.

Post your fax number at several locations within your library.

Design and hang a poster in your library promoting the facsimile service.

Tell patrons about the ability to retrieve library materials from state and national information centers.

Develop a bulletin board around the fax service.

3. GOAL

Orient and educate the library board in the areas of equipment capabilites, facsimile technology, and facsimile applications.

OBJECTIVES

Invite board members to an on-site demonstration.

Educate board members about the system and how it can be used during the 1989 Legislature.

Allow them (optional) to conduct the send or receive operation.

Ask for their assistance in distributing fliers.

Educate board members (using state and national directories) about the state and national fax networks.

4. GOAL

Identify and educate specialized patrons about the fax service, its applications, and state and national networks. The specialized patron could include: physicians, lawyers, city/county officials, legislators, journalists, etc.

OBJECTIVES

Educate the specialized patron about the "end results" of the ILL process. Patrons need to be made aware that the information can be obtained, even if it isn't located at the local library.

Conduct presentations to professional groups.

* Conduct special presentations to the legal professionals.

5. GOAL

Orient, train and educate school officials, school boards, teachers and students in the areas of equipment capabilites, basic facsimile technology and potential applications.

OBJECTIVES

Distribute a master copy of the brochure to all schools. Have the school photocopy and distribute copies.

Invite school librarians and other officials to see a demonstration. This demonstration could be done two (2) days before students arrive.

Invite school board members to participate in a demonstration.

Educate teachers and librarians about the limitations of the system (e.g. not for full books, costs involved, time-lines).

Demonstrate system to school students.

* Give the school library a copy of THE MONTANA FAXNET DIRECTORY AND RESOURCE GUIDE. (The Montana Faxnet Project will give extra copies to the public library).

APPENDIX C

MONTANA FAXNET NETWORK
POLICY ON TELEFACSIMILE USE

Members of the Montana Faxnet Network will make a facsimile service available to library patrons which will allow for the rapid access to information held in state and national libraries. Facsimile service is an integral part of reference service. After resources of the individual library have been exhausted and a timely receipt of the information is a requirement, facsimile service is an option for providing that information. Priority should be given to answering facsimile requests and informing the requesting library if the information is not available. The fax service should be free to all patrons requesting any library materials and the librarian should have the discretion to determine which request(s) are applicable for facsimile transfer.

Since fax transactions involve photo duplication, the librarian should determine if Section 108 of the copyright law applies. A copyright warning must be stamped on all transmitted materials.

MONTANA FAXNET NETWORK
PROCEDURES FOR USING TELEFACSIMILE MACHINES

PURPOSES

1. To increase speed and delivery of interlibrary loan materials between cooperating libraries;

2. To respond to immediate needs of a patron needing material not available at his/her own library;

3. To respond to the immediate needs of the individual requesting courier service for the delivery of non-library related documents;

4. To respond to the needs of the individual by acting as a receiving center for non-library related information;

5. To respond (in textual format) in a timely manner to the concerns and issues of librarians.

PROCEDURES FOR BORROWING

* Determine if the request is appropriate for a fax transaction (considerations could include the urgency of the request and the length of the document);

* Verify the holding site of the document;

* Type the bibliographic information and deadline date on a standard Montana Interlibrary Loan Form. Indicate on the ILL form if the lending library is to respond via facsimile technology;

* Send by fax only those ILL forms that require immediate attention;

* Record the turnaround time to complete the request.

PROCEDURES FOR LENDING

* Retrieve the request from telefacsimile machine as soon as possible and note the deadline of the request. It is recommended that the request be completed within 6 working hours. (Exceptions to this will be in those instances when a lengthy search may be required or when it is clear the requested item is not immediately needed).

  Complete URGENT requests as soon as possible. Urgent or rush terminology shall be defined by the requesting library and accepted as such by the lending library;

* Complete one of the following responses:

  Photocopy, stamp copyright warning and fax requested material;

  Respond via fax if request cannot be filled.

APPENDIX D

COSTS OF PROVIDING TELEFACSIMILE SERVICES

DEVELOPED FOR
LIBRARIES OFFERING

FACSIMILE SERVICES

COMPILED BY

LINDA L. BRANDER, DIRECTOR

MONTANA FAXNET PROJECT

OCTOBER 1, 1988

ACKNOWLEDGEMENTS

I want to thank all individuals who served on the Fee-Development Task Force. An additional statement of appreciation is extended to those members who contributed their time and energy to complete this report. They are Fritz Roos, John Aubry, Barbara Ridgway and Megan Fite.

Linda Brander
Project Director

COST RECOVERY REPORT

INTRODUCTION

The Montana Faxnet Network is a group of libraries which will offer a facsimile service to library patrons. This enhanced program will allow for the rapid access and retrieval of information from sites located outside the parameters of the local library.

The statewide network was started in 1986 with funds granted from the Fred Meyer Charitable Trust Foundation. As of September 30, 1988, individual network participants will be solely responsible for all operational expenses.

In order to plan for the long-term existence of the facsimile network, some financial planning must occur. By knowing the expenses which will be incurred as a result of a facsimile program, library directors and trustees can plan budgets and or develop a cost-recovery program.

The Faxnet Project Director organized a task force to provide research, calculate statistics and compile a report which would address the per page expenditures involved in sending and receiving information via the fax network.

Members of the task force included a telecommunication specialist, an accountant, a private business user, two public librarians, a school librarian, and a representative from the State Library. Members of this task force gathered field statistics, studied communication charges, monitored volume flow, reviewed commercial fax courier fees and calculated personnel time involved in facsimile operations.

The results generated by this task force should to be viewed as informational. Based on these findings, librarians and their boards will have information which can aid in their decision-making process.

This study will review three levels of expenses (basic expenses, communication charges and additional recovery costs).

VOLUME

Volume statistics were calculated over a seven-month period. A per site average was then tallied. The volume category played a key role in the per page cost of a faxed item.

BASIC COSTS FOR SENDING & RECEIVING

Expenditures are computed in this category to included supplies, a maintenance contract and equipment replacement. The per page expenditures are the basic costs which a site incurrs in order to buy supplies, pay for maintenance and replace the equipment.

SENDING

Table I illustrates the itemization of basic expenses incurred to operate the facsimile unit.

TABLE I
BASIC COSTS
SENDING

EXPENSES	PER PAGE
A. Supplies	.02
B. Maintenance	.31
C. Replacement	.42
D. Total Basic Costs	.75

Per page calculations were based on:

A. Supplies were calculated at $12.00 per roll for thermal paper with a 10% waste figured in (when sending, a confirmation slip is printed);

B. The cost of a maintenance contract ($230/yr) divided by the average copies sent per month;

C. The 1988 cost of a mid-size fax unit ($1600) with a life expectancy of 5 years divided by the average copies per month.

RECEIVING

The only category changing during a receive operation is the expense of supplies which cost $.06 per document to receive. This means that $.04 would need to be added to the totals outlined in Table I.

SEND/RECEIVE COMPARISONS

Table II compares the per page rate of sending and receiving documentes.

TABLE II
SEND/RECEIVE COMPARISONS

VOLUME	SEND	RECEIVE
PER PAGE	.75	.79

COMMUNICATION CHARGES

Faxnet statistics provided the numbers used in calculating an average communication expense. Telephone expenses were estimated for intra (within state) and inter (out-of-state) calls.

INTRA STATE TELEPHONE CALLS

The average charge to send one page of information within the state was $.53.

INTER STATE TELEPHONE CALLS

The average charge to send one page of information outside of the state was $.67.

CREDIT CARD USE

If a patron used a telephone credit card, the site would not incur a telephone charge.

TABLE III
INTRA STATE INFORMATION RATES
PER PAGE EXPENSES

CATEGORY	PER PAGE
Basic Costs	.75
Communication (Intra)	.50
Total	1.25

TABLE IV
INTER STATE INFORMATION RATES
PER PAGE EXPENSES

CATEGORY	PER PAGE
Basic Costs	.75
Communication (Inter)	.70
Total	1.45

SUMMARY COMMUNICATION CHARGES

Long-distance rates are charged according to the boundaries crossed. On the average, calls within the state are about .20 less than calls conducted out-of-state. If an equal number of pages are sent to intra and inter state locations, a site could estimate a $.60 per page communication cost. However, the library must monitor the pages sent under each category. For example, if more pages are sent out-of-state, the $.60 estimate would not cover all of the communication expenses.

INTERNATIONAL

Due to lack of sufficient data, international rates could not be calculated. However based on competitive prices of commercial vendors, international fees have been compared in Table V. Figures presented in this study were taken from a statewide survey of commercial users. Table V compares international fees charged by the commercial sector.

Since no statistics were available, the library will need to review Table V in order to project an international fee.

TABLE V
COMMERCIAL FAX SERVICES
INTERNATIONAL FEES

CITY	SEND
BILLINGS	$ 5.00 per page
* BOZEMAN	$ 7.00 1st page
	$ 9.00 2 pages
	$11.00 3 pages
	$12.00 4 pages
	$ 2.00 ea add page
* HELENA	$ 8.00 1st page
	$ 3.00 2 - 5 pages
	$ 1.00 ea add page
* GLENDIVE	$15.00 1st page
	$ 5.00 ea add page
* WOLF POINT	$ 5.00 1st page
	$ 2.50 ea add page

* Telephone call not included in charge.

ADDITIONAL RECOVERY EXPENSES

The items calculated under this category include salaries (director and clerk), monthly equipment charges (shared telephone line for fax unit) and overhead expenses.

SALARIES

The per page calculation is based on time required to complete a fax transaction (send/receive) multiplied by the per minute wage of the library employee. Statistics were gathered over a two-week period to determine how many minutes were required to complete the send and receive functions. Computed averages indicated it required 3.6 minutes for directors and 2.0 minutes for clerks to fax one page of material.

MONTHLY EQUIPMENT CHARGES

The per page expense for this category is based on the monthly equipment charge. The $50.00 estimated phone equipment charge was divided by the number of minutes devoted to facsimile business and multiplied by the average number of minutes required to send a one page document. The calculated expense equalled $.02 per page.

OVERHEAD

Overhead costs were calculated at 20% of the library's indirect costs.

Overhead expenses could increase the per page cost by $.20.

Table VI reflects all areas researched and calculated by the Fee Development Task Force.

TABLE VI
SENDING
INFORMATIONAL RATES
COST PER PAGE

CATEGORY	PER PAGE
BASIC COSTS	.75
*COMMUNICATION CHARGES	.60
ADDITIONAL RECOVERY EXPENSES	.43
TOTAL	1.78

* The $.60 communication charge is based on the assumption that intra and inter volumes are equal.

* Table VI assumes that no credit card will be used by the patron.

SLIDING SCALE

Each site may want to determine the minimum amount (see Table VI) that could be recovered for each page. Sending numerous pages could decrease the per page charge on a sliding scale basis.

Table VII illustrates the sliding scale concept.

TABLE VII
SLIDING SCALE

NUMBER OF COPIES SENT	RATE PER PAGE
1	M.C. + $1.00
2 - 10	M.C. + $ .50
10 +	Minimum Charge

* M.C. equals minimum cost

* The minimum cost is figured by determining which expenses (basic costs, communication charges, additional recovery expenses) will be recovered. (see Table VI)

SUMMARY

The information generated by this committee is designed to provide background information for estimating the costs of telefacsimile services.

APPENDIX E

THE COMPETITIVE EDGE

"Keeping Abreast of Your Competitors in the Computer Age"

The State Law Library and the Montana Faxnet Project
Cordially invite you to participate in a
Free Seminar
October 25, 1988, 1:30 PM - 3:30 PM
State Law Library,
Justice Bldg, 215 N. Sanders, Helena

At the end of the workshop you will have a

* Understanding of electronic information and what it means to your profession;
* Knowledge of information stored in database systems; and
* Capability to electronically access Montana Supreme Court and Attorney General Opinions.

Application has been made for 2.0 hours of C.L.E. credits.
For Additional Information Contact: Linda Brander 444-2427

APPENDIX F

MONTANA FAXNET
INFORMATION REQUEST FORM

NATURE OF REQUEST:

Please check all applicable spaces regarding this request. The patron's background requesting this information is :___ Business ___ Law___ Health __ Government Education (__ Student __ Faculty) Other_____

How did you hear about this service? __ Librarian
___ Flyer/Mailer ___ Signs ___ News Story ___ Talk ___ Other

FOR OFFICIAL USE ONLY

REQUESTING SITE:_____ REQUEST # _____

	DATE/TIME	STAFF INITIALS	TIME SPENT ON REQUEST
Patron request received:			
(This includes reference interview, data base searches)			
Date item placed on fax unit:			
Fwd'd to document source:			
Name/Location of document source:			
Processing time at document source:			
Received from document source:			
Patron notified:			
Patron retrieves document:			

Total mins. up to patron notified spent on request _____

Request was filled __
Request was not filled __
Reasons: Don't have info __
In collection, but currently not available __
Other_____
COMMENTS:

APPENDIX G

Please return form to:
Montana Faxnet Project

Document Site: _____

Sector using this information:

__ Business ___ Government __ Health __ Law __Education (Please circle one of these if the sector is Education: Student or Faculty)
___ Other _____

Please rate your satisfaction (1=highly satisfied/5=not satisfied).

1. The information received was the information requested.

1 2 3 4 5

2. Were you satisfied with the speed of information delivery.

1 2 3 4 5

3. Were you satisfied with the legibility of the document(s).

1 2 3 4 5

4. How many people used the information that was delivered?

1 2 3 4 5 or more

5. What did you especially like or dislike about the service?

_____

_____

Thank you for your assistance.
This will assist in the evaluation
of the two-year document delivery project.